

Appl. No. 09/840,054
Amdt. dated March 15, 2005
Reply to Office Action of November 15, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for visual copyright protection comprising the steps of:

- (a) inputting light from a light source;
 - (b) selecting a disruptive light modulating pattern based upon a criterion, said criterion being how said pattern is perceived by an IRD and a human differently;
 - (c) modulating a light array, having at least one element, using said disruptive light modulating pattern;
 - (d) projecting said light onto said light array producing a modulated light beam; and
 - (e) outputting said modulated light beam;
- wherein said disruptive light modulating pattern is selected from a set of predetermined disruptive light modulating patterns.

Claim 2 (original): A method for visual copyright protection according to claim 1 wherein said light array comprises a multitude of light arrays.

Claim 3 (original): A method for visual copyright protection according to claim 1 wherein said criterion further includes selecting said pattern for the purpose of inserting a watermark.

Claim 4 (original): A method for visual copyright protection according to claim 1, wherein said criterion further includes selecting said pattern for the purpose of inserting a human perceivable image.

Claim 5 (original): A method for visual copyright protection according to claim 1, wherein said criterion further includes selecting said pattern for the purpose of inserting a non-human perceivable image.

Claim 6 (original): A method for visual copyright protection according to claim 1, wherein said criterion further includes selecting said pattern for the purpose of creating disruption effects.

Claim 7 (original): A method for visual copyright protection according to claim 6, wherein said criterion further includes selecting said pattern for the purpose of creating disruption effects containing motion.

Claim 8 (original): A method for visual copyright protection according to claim 1, further including the step of projecting said modulated light beam onto a surface.

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Claim 9 (original): A method for visual copyright protection according to claim 8, wherein said surface is an image bearing surface.

Claim 10 (original): A method for visual copyright protection according to claim 8, wherein said modulated light beam is focused near said surface.

Claim 11 (original): A method for visual copyright protection according to claim 8, wherein said surface is being utilized by a projector.

Claim 12 (original): A method for visual copyright protection according to claim 8, wherein said modulated light beam illuminates an area.

Claim 13 (original): A method for visual copyright protection according to claim 1, wherein said disruptive light modulating patterns can modulate each element differently.

Claim 14 (currently amended): A method for visual copyright protection ~~according to claim 1, further including the step of comprising the steps of:~~

- (a) inputting light from a light source;
- (b) splitting said light;
- (c) selecting a disruptive light modulating pattern based upon a criterion, said criterion being how said pattern is perceived by an IRD and a human differently;
- (d) modulating a light array, having at least one element, using said disruptive light modulating pattern;
- (e) projecting said light onto said light array producing a modulated light beam; and
- (f) outputting said modulated light beam;

Claim 15 (original): A method for visual copyright protection according to claim 1, further including the step of inputting said criterion from an external source.

Claim 16 (original): A method for visual copyright protection according to claim 1, further including the step of inputting said disruptive light modulating pattern from an external source.

Claim 17 (cancelled):

Claim 18 (previously presented): A method for visual copyright protection according to claim 1, wherein said disruptive light modulating pattern interlaces disruptive content with nondisruptive content, said disruptive content being interlaced at a rate too fast for a human to perceive.

Claim 19 (original): A method for visual copyright protection according to claim 1, wherein said disruptive light modulating pattern is a multitude of disruptive light modulating patterns.

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Claim 20 (original): A method for visual copyright protection according to claim 19, wherein each of said multitude of disruptive light modulating patterns modulates at least one of said elements.

Claim 21 (original): A method for visual copyright protection according to claim 20, wherein each of said multitude of disruptive light modulating patterns modulates at least one of said elements in an array of elements to generate a disruptive effect.

Claim 22 (original): A method for visual copyright protection according to claim 1, further including the steps of:

- (a) receiving an input image; and
- (b) combining said input image with said disruptive light modulating pattern.

Claim 23 (original): A method for visual copyright protection according to claim 1, wherein said disruptive light modulating pattern is a multitude of sequenced disruptive light modulating patterns.

Claim 24 (original): A method for visual copyright protection according to claim 1, wherein said criterion is based upon a dynamic analysis of source content.

Claim 25 (twice amended): An apparatus for visual copyright protection comprising:

- (a) a light source capable of producing light;
- (b) a light array, having at least one element, capable of acting on the light to produce a modulated light beam;
- (c) a light array controller for modulating said light array using at least one disruptive light pattern; and
- (d) a disruption processor for producing said at least one disruptive light pattern based upon a criterion, said criterion being how said pattern is perceived by an IRD and a human differently;

wherein:

- (a) said disruption processor generates at least one disruption effect selected from the group consisting of:
 - (i) a visible disruption effect;
 - (ii) IRD command signals;
 - (iii) an autofocus disruptive effect;
 - (iv) moving disruption effects;
 - (v) an exposure disruptive effect; and
 - (vi) Moiré disruptive effects; and
- (b) said disruption effect is a multitude of said disruption effects.

Claim 26 (original): The apparatus according to claim 25, further including input content.

Claim 27 (original): The apparatus according to claim 26, wherein said input content is analog data.

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Claim 28 (original): The apparatus according to claim 26, wherein said input content is digital data.

Claim 29 (original): The apparatus according to claim 25, wherein said disruption processor further includes disruption data.

Claim 30 (original): The apparatus according to claim 25, wherein said disruption processor operates on at least one image element.

Claim 31 (original): The apparatus according to claim 30, wherein at least one of said image elements is a pixel.

Claim 32 (original): The apparatus according to claim 30, wherein at least one of said image elements is a group of pixels.

Claim 33 (original): The apparatus according to claim 30, wherein at least one of said image elements is an image frame.

Claim 34 (original): The apparatus according to claim 25, wherein said disruption processor is a primary disruption processor and said primary disruption processor further includes a multitude of supporting disruption processors.

Claim 35 (original): The apparatus according to claim 25, wherein said light array has a characteristic from the group consisting of:

- (a) reflective; and
- (b) translucent.

Claim 36 (original): The apparatus according to claim 25, wherein said light array is selected from the group consisting of:

- (a) a liquid crystal display;
- (b) MEMS DMD;
- (c) I-DLA;
- (d) a cathode ray tube; and
- (e) a retinal display.

Claim 37 (original): The apparatus according to claim 25, wherein said disruption processor introduces a disruption watermark component.

Claim 38 (original): The apparatus according to claim 25, wherein said disruption processor introduces a disruption frequency component.

Claim 39 (original): The apparatus according to claim 38, wherein said disruption frequency component is a multitude of disruption frequency components.

Claim 40 (cancelled).

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Claim 41 (cancelled).

Claim 42 (currently amended): The apparatus according to claim [[41]] 25, wherein said multitude of disruption effects are varied temporally.

Claim 43 (currently amended): The apparatus according to claim [[41]] 25, wherein said multitude of disruption effects are varied spatially.

Claim 44 (original): The apparatus according to claim 25, wherein said disruption processor inserts new disruptive content.

Claim 45 (original): The apparatus according to claim 44, wherein said new disruptive content includes at least one pattern selected from the group consisting of:

- (a) a dark color;
- (b) a random pattern;
- (c) a logo;
- (d) a copyright notice;
- (e) a spot;
- (f) geometric shape; and
- (g) characters.

Claim 46 (original): The apparatus according to claim 25, further including a security interlock.

Claim 47 (new): A method for visual copyright protection comprising the steps of:

- (a) inputting light from a light source;
- (b) selecting a disruptive light modulating spatial pattern based upon a criterion, said criterion being how said pattern is perceived by an IRD and a human differently;
- (c) spatially modulating a light array, having at least one element, using said disruptive light modulating spatial pattern;
- (d) projecting said light onto said light array producing a spatially modulated light beam; and
- (e) outputting said spatially modulated light beam.

Claim 48 (new): An apparatus for visual copyright protection comprising:

- (a) a light source capable of producing light;
- (b) a light array, having at least one element, capable of acting on the light to produce a spatially modulated light beam;
- (c) a light array controller for spatially modulating said light array using at least one disruptive light spatial pattern; and
- (d) a disruption processor for producing said at least one disruptive light spatial pattern based upon a criterion, said criterion being how said pattern is perceived by an IRD and a human differently.